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wherein when said hollow shaft rotates said screw end said piston head move relative to said reservoir so as to move said fluid in or out of said reservoir.

26. A method of changing optical properties of a lens cell, said cell comprising two transparent membranes, each of said membranes having an edge portion that extends around a periphery of said respective membrane, each of said edge portions having an exterior portion and an interior portion, with at least one of membranes being flexible; a ring located between said interior portions of said edge portions of said membranes, said ring extending around the peripheries of said membranes such that said membranes are spaced apart and form a cavity therebetween, said cavity being filled with a transparent fluid; a frame having a therein, said membrane edge portions being located within said channel, said channel having a lip that is adjacent to said exterior portion of said flexible membrane edge portion, said lip having an inside surface that is spaced apart from an end surface of said ring so as to form a gap; said edge portion of said flexible membrane being clamped within a portion of said gap between said lip inside surface and said ring end surface, wherein said edge portion of said flexible membrane pivots freely between said lip and said ring as said flexible membrane flexes due to changes in the fluid in said cavity, comprising the steps of:

- a) providing a channel for said fluid from one location of said cavity to a location that is outside of said cell and then to another location of said cavity;
- b) providing a one-way valve in said channel;
- c) changing the amount of said fluid in said channel and said cell by adding or removing said fluid from said channel wherein said flexible membrane flexes in response to said fluid change.

27. The method of claim 26, wherein said step of changing the amount of said fluid in said channel and said cell by adding or removing said fluid from said channel, further comprises the step of inserting a hollow needle into said channel and adding or removing said fluid from said channel through the needle.

28. The method of claim 26, wherein said step of changing the amount of said fluid in said channel and said cell by adding or removing said fluid from said channel, further comprises the step of removing gas from said channel.

29. An optical system, comprising:

- a) a first lens cell;
- b) a second lens cell;
- c) each of said first and said second lens cells comprising:
  - i) two transparent membranes, each of said membranes having an edge portion that extends around a periphery of said respective membrane, each of said edge portions having an exterior portion and an interior portion, with at least one of said membranes being flexible;
  - ii) a ring located between said interior portions of said edge portions of said membranes, said ring extend-

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ing around the peripheries of said membranes such that said membranes are spaced apart and form a cavity therebetween, said cavity being filled with a transparent fluid;

- iii) a frame having a channel therein, said membrane edge portions being located within said channel, said channel having a lip that is adjacent to said exterior portion of said flexible membrane edge portion, said lip having an inside surface that is spaced apart from an end surface of said ring so as to form a gap;
- iv) said edge portion of said flexible membrane being clamped within a portion of said gap between said lip inside surface and said ring end surface, wherein said edge portion of said flexible membrane pivots freely between said lip and said ring as said flexible membrane flexes due to changes in the fluid in said cavity;
- v) a port located in said ring, said port communicating with a reservoir for said fluid and also communicating with said cavity;
- vi) said reservoir comprises a piston located within a cylinder, said cylinder containing said reservoir of said fluid;
- vii) a motor for moving said piston in and out of said cylinder;
- d) a first controller being connected to said first lens cell motor so as to operate said first lens cell motor and move said first lens cell piston in and out of said first lens cell cylinder;
- e) a second controller being connected to said second lens cell motor so as to operate said second lens cell motor and move said second lens cell piston in and out of said second lens cell cylinder.

30. The optical system of claim 29 wherein the first controller is quiescent when the first lens cell piston is not moving within the first lens cell cylinder and the second controller is quiescent when the second lens cell piston is not moving within the second lens cell cylinder.

31. The optical system of claim 29 further comprising:

- a) a communications link between the first controller and the second controller;
- b) the first controller having a first mode and a second mode, wherein in the first mode, the first controller controls only the first lens cell motor, and in the second mode, the first controller controls the first lens cell motor and communicates with the second controller over the communications link so that the second lens cell piston is operated by the second lens cell motor in a manner that is similar to the operation of the first cell portion.

32. The optical system of claim 31 further comprising a switch connected to the first controller for changing the first controller between the first and second modes.

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